

## **REMARKS**

### **Specification**

The Examiner stated that the specification still contained the new matter added by the Applicant's amendment of 1/7/08 and that Applicant is required to cancel the new matter in the reply to this office action. In Applicant's amendment of 1/7/08 the specification was amended to replace the paragraph on page 7, lines 13-17 with two new paragraphs. These two paragraphs are now amended to remove the alleged new matter that was added to the specification, and to restore the original paragraph of page 7, lines 13-17 to the specification.

### **35 USC 103(a)**

The Examiner stated that with the removal of the new matter, claims 21, 23-29, and 33-37 are rejected as being unpatentable over Goldberg et al, in view of Alster, in view of Ho, and in view of Kye. Claim 21 has been amended to overcome this rejection by including the limitation that wherein said exploding a contaminant on the surface of the skin leaves the epidermis intact and undamaged, and produces a wound selectively in the high dermis. Support for this amendment is found in the specification on page 3, lines 10-11; page 5, lines 19-21; page 6, lines 4-6; and page 7, line 14.

The Examiner indicated that the claims do not exclude the removal of skin because while the claims failed to explicitly state that the treatment fails to remove the skin, the method claimed allows for more than two or even 3 to 5 pulses of Kye or Goldberg. The Examiner further states that it is not clear what treatment the claims refer to and how they distinguish from the laser therapy of the above references. In the amended claim 21 the method is limited to leaving the epidermis intact and undamaged. This can be achieved only by using no more than one or two pulses to explode the carbon particles.

The previous Examiner in an office action of April 1, 2008 maintains "Therefore, the prior art indicates that some skin either in the stratum corneum or beneath the stratum corneum will be removed by laser surgery to attain cosmetic benefits (page 15, lines 19-

20) The previous Examiner further states that “...the state-of-the-art indicates that skin resurfacing is the removal of skin” (page 14, lines 20-21). Thus, all the prior art cited (Goldberg, Alster, Ho, and Kye) disclose only methods that remove skin (epidermis). This includes Goldberg (“Skin resurfacing utilizing a low-fluence Nd:YAG laser”). All of these methods disclosed in the prior art references require some removal of the stratum corneum, which is part of the epidermis. The prior art references do not disclose methods which do not remove the stratum corneum. Consequently, the prior art references do not suggest or motivate one to combine topical retinoic acid with a procedure that does not remove the stratum corneum.

The Examiner states that it is the Examiner's position that replacing the laser method of resurfacing with the exploding particle method of resurfacing in Alster, Ho, and Kye would be obvious. With respect to amended claim 21, it would not be obvious to replace the laser method of resurfacing with Applicant's exploding particle method in Alster, Ho, and Kye because Applicant's exploding particle method does not remove the stratum corneum since the epidermis remains intact with Applicant's method.

The previous Examiner stated in the office action of April 1, 2008 that the specification states that Applicant's method includes skin resurfacing (page 6, line 2). The previous Examiner argues that “...and the state of the art indicates that skin resurfacing is a removal of skin. Therefore, if the skin is not removed, as argued by applicant since only 1-2 pulses are used, then the skin is not resurfaced and the cosmetic effect is not attained.” However, the cosmetic benefit is attained when Applicant's exploding carbon particle method (which does not remove the skin) is combined with topical retinoic acid. What applicant discovered, and which was not known in the prior art, is that the combination of an exploding particle method (which stimulates collagen production selectively in the high dermis and which leaves the upper dermis intact) with topical retinoic acid produces a sustained elevation of collagen in the high dermis. It is this increase production of collagen in the high dermis, just beneath the epidermis, which produces a skin resurfacing effect, without any loss of epidermal skin, and without the need to remove epidermal skin. This result was not predictable from the prior art and was unexpected. There is nothing in the prior art to suggest or motivate one to use topical retinoic acid with an exploding particle method that does not remove stratum corneum or

which leaves the epidermis intact. Therefore, applicants method as claimed in the amended claims it's not obvious in view of the cited prior art.

The Examiner states that the Applicant does not state how the actual steps of the application of laser light is different versus the prior art, such as Goldberg. The Examiner contends that Goldberg teaches the laser light of the same pulses, pulse duration, wavelength, etc. and Applicant merely argues that the method of Goldberg is different from Applicant's method without providing any comparison or data. The Examiner states that Applicant provides no basis for concluding the nonablative procedure of Goldberg to be ablative. Applicant respectfully disagrees. The previous Examiner has admitted in the office action of 4-1-2008 that there must be some removal of skin in the method of Goldberg to get a cosmetic benefit. Goldberg uses the method of Tankovich, and the Tankovich disclosures (US Patent Nos 5,423,803 and 6,036,684) clearly show that stratum corneum must be removed to obtain a beneficial effect. Goldberg indicates that he uses the same laser for hair removal (page 23 and 24) which requires removal of stratum corneum. In the Results section (page 26), Table 6, and the Discussion section (page 27) Goldberg states that his method produced erythema in 60% of treated patients for 1 to 2 hours for each of the three treatments. Also, some patients showed pinpoint bleeding and purpura. These results are all consistent with the removal of epidermal skin and damage to the epidermis, and that the Goldberg method is ablative.

The amended claims do not encompass the use of topical retinoic acid with Goldberg's methods or the laser methods of Alster, Ho, and Kye because Applicant's method, as stated in the amended claims, is limited to exploding carbon particles on the surface of the skin wherein the epidermis is left intact and undamaged. The disclosures of Tankovich clearly show a method whereby carbon particles can be exploded on the surface of the skin without removing stratum corneum, leaving the epidermis intact. The methods disclosed in the cited prior art to resurface the skin do not leave the epidermis intact and undamaged. Applicant's method can be used repeatedly throughout a patient's lifetime without damaging the skin to produce a sustained improvement in the appearance of the skin. The prior art methods disclosed in the cited references cannot be used repeatedly throughout a patient's lifetime without damaging the skin, even if topical retinoic acid is applied.

Applicant would like to mention that the Examiner has made reference to prior office actions dated March 2, 2008 and March 20, 2008. Applicant's records do not show any office actions on those dates.

### **Conclusion**

In light of the foregoing amendments and remarks, amended claim 21 is not obvious over Goldberg in view of Alster, Ho, and Kye, and is therefore allowable. Claims 23-29 and 33-40 are thus allowable as depending from allowable claims. Accordingly, the Applicant respectfully requests that the Examiner withdraw the rejections and allow all the pending claims.

Respectfully submitted,

A handwritten signature in black ink that reads "Gerald M. Walsh". The signature is written in a cursive, slightly slanted style.

Gerald M. Walsh  
Reg. No. 34,946  
Bush Intellectual Property Law Group, LLC  
Phone: (205) 972-0145  
Facsimile: (205) 972-0163